

Title (en)
Microcomputer including serial data communication unit

Title (de)
Mikrocomputer mit einer Übertragungseinheit für serielle Daten

Title (fr)
Micro-ordinateur avec une unité de communication de données série

Publication
EP 0471382 B1 19971126 (EN)

Application
EP 91113797 A 19910816

Priority
JP 21556690 A 19900815

Abstract (en)
[origin: EP0471382A2] A microcomputer comprises a CPU executing a string of instructions for a program in synchronism with a clock signal and a serial data communication unit including a serial data terminal and a serial clock terminal which are to be coupled to a peripheral device, the CPU supplying a transfer start command to the serial data communication unit when it executes a serial data communication instruction, the serial data communication unit including a serial a serial clock control circuit responding to the transfer start command and starting to supply the serial clock terminal with a serial clock signal having the same frequency as the clock signal in synchronism with the beginning of a certain machine cycle of CPU, a shift register, and a data transfer control circuit responding to the transfer start command and operating in a first mode to cause the shift register to output data stored therein to the serial data terminal one bit by one bit in synchronism with the serial clock signal and in a second mode to cause the shift register to capture data appearing at the serial data terminal one bit by one bit in synchronism with the serial clock signal. <IMAGE>

IPC 1-7
G06F 13/38; **G06F 13/42**

IPC 8 full level
G06F 13/38 (2006.01); **G06F 13/42** (2006.01); **G06F 15/78** (2006.01); **H04L 7/04** (2006.01)

CPC (source: EP US)
G06F 13/423 (2013.01 - EP US); **G06F 15/7814** (2013.01 - EP US)

Cited by
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DE FR GB

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EP 0471382 A2 19920219; **EP 0471382 A3 19920401**; **EP 0471382 B1 19971126**; DE 69128268 D1 19980108; DE 69128268 T2 19980709; JP 2778222 B2 19980723; JP H0497472 A 19920330; US 5507001 A 19960409

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